

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Claims 1 - 2 (Canceled):

Claim 3 (Currently Amended): Method for the production of a hybrid organic solar cell having the general structure

Substrate + EM/HTM/dye/SOL/EM, or

Substrate + EM/SOL/dye/HTM/EM, or

~~Substrate + EM/HTM/SOL/EM,~~

in which

EM is an electrode material, selected from the group consisting of a transparent conductive oxide (TCO) and metal, with at least one of the EM layers of the cell being a TCO,

HTM is a hole transport material,

SOL is a semiconducting oxide layer,

"dye" means a suited dye,

comprising vapor-deposition of the SOL of the hybrid organic solar cell, and

~~further comprising vapor-deposition of the HTM layer, and the dye layer at least one further layer of the hybrid organic solar cell in addition to the SOL layer, which further layer is a HTM layer or a dye layer.~~

Claims 4 - 24 (Canceled)

Claim 25 (Previously Presented) Method according to claim 3, comprising additional deposition or vapor-deposition of a layer of lithium fluoride close to EM interfaces either on one side or both sides.

Claim 26 (Previously Presented) Method according to claim 3, comprising increasing the surfaces of the interfaces of the layers by use of structured indium tin oxide, co-evaporation of HTM and dye or dye/TiO₂ or co-evaporation of HTM and a dopant.

Claim 27 (Previously Presented) Method according to claim 3, wherein the substrate is selected from the group consisting of glass, coated glass, polymeric foils, norbornene-based foils, SnO₂-coated metal foils and stainless steel foils, wherein said polymeric foils made from PET, PEN or PI.

Claim 28 (Previously Presented) Method according to claim 3, wherein the substrate is flexible.

Claim 29 (Previously Presented) Method according to claim 3, wherein EM is selected from the group consisting of indium tin oxide, fluorine doped tin oxide, zinc oxide, and metal-doped zinc oxide, wherein said metal is selected from the group consisting of Au, Al, Ca, and Mg or combinations of metals like Al/Li, Mg/Ag.

Claim 30 (Previously Presented) Method according to claim 3, wherein EM is indium tin oxide.

Claim 31 (Previously Presented) Method according to claim 3, wherein HTM is selected from the group consisting of phthalocyanine and derivatives thereof (with or without a central atom or group of atoms), metal-free and metal containing porphyrins and derivatives thereof, TPD derivatives, triphenylamine and its derivatives, (including different ground structure as TDATAs, TTABs, TDABs, and cyclic variations like N-carbazoles and its derivatives), thiophenes, polythiophenes and derivatives thereof, polyanilines and derivatives thereof and hexa-benzocoronene and its derivatives, triphenyldiamine derivatives, aromatic diamine compounds having connected tertiary aromatic amine units of 1,-bis(4-(di-p-tolylamino)phenyl)- cyclohexane, aromatic diamines containing two or more tertiary amines and having two or more fused aromatic rings substituted on the nitrogen atoms, aromatic trimers having a starburst structure derived from triphenylbenzene, aromatic diamines, triphenylamine derivatives whose molecule is sterically asymmetric as a whole, compounds having a plurality of aromatic diamino groups substituted on a pyrenyl group, aromatic diamines having tertiary amine units connected through an ethylene group, aromatic diamines having a styryl structure, starburst type aromatic triamines, benzyl-phenyl compounds, compounds having tertiary amine units connected through a fluorene group, triamine compounds, bisdipyridylaminobiophenyl compounds, N,N,N-triphenylamine derivatives, aromatic diamines having a phenoxazine structure, diaminophenylanthridine, and other carbazole derivatives, hydrazoen compounds, silazane compounds, silanamine derivatives, phosphamine derivatives, quinacridone compounds, stilbene compounds, triazole derivatives, oxadiazole derivatives, imidazole derivatives, polyarylalkane derivatives, pyrazoline derivatives, pyrazolone derivatives, oxadiazole derivatives, imidazole derivatives, polyarylalkane derivatives, pyrazoline derivatives, amino-substituted chalcone derivatives, oxazole derivatives, styrylanthracene derivatives, fluorenone derivatives and polysilane

derivatives, all compounds alone or in admixture of two or more, polymers, polyphosphazenes, polyamides, polyvinyl triphenylamine, polymers having a triphenylamine skeleton, polymers having triphenylamine units connected through a methylene group and polymethacrylates containing aromatic amine.

Claim 32 (Previously Presented) Method according to claim 3, wherein HTM is copper-phthalocyanine (CuPc).

Claim 33 (Previously Presented) Method according to claim 3, wherein SOL is selected from the group consisting of semiconducting oxides, like TiO_2 , SnO_2 , ZnO , Sb_2O_3 , and PbO .

Claim 34 (Previously Presented) Method according to claim 3, wherein SOL is TiO_2 .

Claim 35 (Previously Presented) Method according to claim 3, wherein the dye is selected from the group consisting of di- or monosubstituted perylenes with all possible substituents, terrylene, quinacridone, anthraquinone, nealred, titanylphthalocyanine, porphines and porphyrines and derivatives thereof, polyfluorenes and derivatives thereof and azo-dyes.

Claim 36 (Previously Presented) Method according to claim 3, wherein a dye layer is deposited in a thickness of about 5 to about 65 nm and the SOL is deposited in a thickness of about 5 to about 50 nm.

Claim 37 (Previously Presented) Method according to claim 3, wherein more than one dye is used in one cell.

Claim 38 (Previously Presented) Method according to claim 3, wherein the substance of the HTM is doped.

Claims 39 – 41 (Canceled)

Claim 42 (Withdrawn) Method according to claim 31, wherein said HTM is an aromatic diamine containing two or more tertiary amines and having two or more fused aromatic rings substituted on the nitrogen atoms and is 4,4-bis[(N-1-naphthyl)-N-phenylamino]-biphenyl.

Claim 43 (Withdrawn) Method according to claim 31, wherein said HTM is an aromatic diamine and is N,N'-diphenyl-N,N'-bis(3-methylphenyl)-(1,1'-biphenyl)-4,4'-diamine, $\alpha,\alpha,\alpha',\alpha'$ -tetramethyl- α,α' -bis(4-di-p-tolylaminophenyl)-p-xylene.

Claim 44 (Withdrawn) Method according to claim 31, wherein said HTM is a stilbene compounds and is 4-di-p-tolylamino-stilbene and 4-(di-p-tolylamino)-4'-[4-di-p-tolylamino-styryl]stilbene.

Claim 45 (Withdrawn) Method according to claim 31, wherein said HTM is a polymer selected from the group consisting of polyvinyl carbazole and polysilanes.

Claim 46 (Withdrawn) Method according to claim 31, wherein when said HTM is a polymer said polymer has an average molecular weight of at least 1,000 Da.

Claim 47 (Withdrawn) Method according to claim 31, wherein when said HTM is a polymer said polymer has an average molecular weight of at least 5,000 Da.

Claim 48 (Previously Presented) Method according to claim 35, wherein when said dye is a di- or monosubstituted perylenes with all possible substituents and said dye is selected from the group consisting of perylene anhydrid, perylene dianhydrides, perylene imides, perylene diimides, perylene imidazoles, perylene diimidazoles and derivatives thereof.